

Stuart Raceway

2017 Limited Sprint Car Rules

305 & 360 Car Rules:

Any driver who fails to display proper judgment when a caution or red flag is displayed will be subject to immediate disqualification for the night.

1: Drivers new to sprint cars must demonstrate their understanding and ability to properly start and stop the car safely before they are permitted to compete.

2: Limited Sprint Cars must provide their own vehicle to assist in pushing or starting any time when in the pit area and pushing off for a race. In the event of a caution during a race the Stuart Raceway push vehicle will assist in restarting, but only within the track area. Push vehicles are only allowed on the track after a red flag has been lifted to assist in the restart of the sprint cars.

3: Sprint car appearance. The minimum wheelbase is 80" inches with a maximum of 95" inches.

4: The minimum weight with a driver after each race:

360 engine 1595 lbs.

305 engine 1550 lbs. with or without a fire suppression system.

The top three cars in all heat races and the top six in all feature races MUST weigh before going to their pits.

Cars starting weight must allow for fuel burn off. Any **ballast** must be securely bolted, and located between the front motor plate to 12" behind rear motor plate. **Ballast** will not be permitted when using a lightened engine block.

5: **Ballast** will not be permitted in the rear bumpers and rub rails, which must be steel, with a maximum wall thickness of .095

6: A right rear bead lock is required. Bleeders will not be permitted. The right rear tire will be a medium compound.

7: Wing(s): The main wing may have a maximum of 25 sq. feet, 61" wide, with 30"inch x 72"inch side boards. The front wing must be a maximum of 2'feet x 3'feet with the leading edge no more than 6" inches ahead of front tires.

8: Cockpit adjustable weight jacks, shocks, or wings will not be permitted. Additional reservoir shocks (internal or external) will not be permitted.

9: Titanium, carbon, and/ or ceramic brake materials will not be permitted. Titanium and/or carbon rotating parts larger than 1.5" diameter will not be permitted. Carbon drive train parts will not be permitted.

10: Open drive lines will not be permitted. Safety hoop or strap is required. Center section of the rear end must be centered within the rails.

11: A fuel tank & bladder assy. or Fuel Safe enduro cell meeting FIAFT3 & SFI Spec. 28.1 is required. A main fuel line shut off is required. An on board fire suppression system is recommended.

12: Only pure methanol is allowed. Additives of any type will not be permitted. Fuel is subject to chemical analysis.

13: Safety requirements: SFI approved helmet, 5 point harness, fire suit, gloves, roll bar padding, shoes, arm restraints. Hans® type device strongly recommended.

360 Engine Rules:

1. 360 Cubic Inches: plus 1% maximum displacement (360 plus 1% = 363.6).
2. No aluminum blocks. No Titanium in engines, excluding valves and valve retainers.
3. Cast iron heads and block
4. Piston type optional.
5. Flat tappet or roller cams.
6. Any intake manifold.
7. Any one four bbl. carburetor.
8. Header design optional.
9. Dry sump lubrication system optional.

305 Engine Rules:

Only registered and certified RaceSaver® engines will be allowed to compete. The heads are marked with 2 sets of serial numbers (Brodix & RaceSaver®) and both logos (RaceSaver® & FGRS). These heads are registered with RaceSaver® by their serial number at the time of sale. Registered head serial numbers are in our master head files. Head serial numbers must match our serial number registry to be allowed to compete in RaceSaver® events. RaceSaver® events will require a registration hard card from RaceSaver® in order to compete. The hard card will carry the name, address, head serial numbers, seal serial numbers, and home region. All new engines will be required to obtain a hard card at the time of engine sealing. Existing engines may obtain a hard card by contacting RaceSaver®.

All engines must be sealed with RaceSaver® serial numbered seals before they are permitted to compete. RaceSaver® personnel certified to seal engines are available throughout the country. The bolts must be drilled for sealing wire on: 2 adjacent cylinder head bolts on each head, 2 intake bolts, and 2 timing cover bolts. All logo and trademark stamps must be intact at time of inspection. Detailed information on sealing procedures are available by contacting RaceSaver®.

- 1: Only the following engine blocks will be permitted. GM 305 V-8s with the following approved casting numbers: 361979 460776 460777 460778 14010201 14010202 14010203 14088551 14016381 14016382 14016383 14094766 355909 14093627 14101147 10243878 4715111 10046164 14102058 A specific Dart Machinery block, purpose built and approved for RACESAVER®, competition is the "Little M" "B" block: pn. 31151411.
- 2: Ballast weight will not be permitted in cars that utilize a lightened block.
- 3: A maximum of 315.9 cubic inches will be permitted (+/-0.0). Stroke 3.480" (+/-0.020) Max bore 3.801. If 3.5" stroke, max bore is 3.790 Bore: Plain cast iron. Sleeves will be permitted for repair only.
- 4: Only flat top pistons with valve reliefs will be permitted. Pistons may not protrude from cylinder bore.
- 5: Only an iron or steel crankshaft, with a minimum weight of 48 lbs. will be permitted, (-1%). The main bearing diameter will be 2.450 (-.030). Weight added to crank except balance metal, which must be welded in place, will not be permitted.
- 6: Only 5.700" steel connecting rods, with a rod journal dia. 2.100 (-.030) will be permitted. Oil pan may be removed for inspection at any time.
- 7: Only chain cam drives will be permitted. Variable cam timing will not be permitted.
- 8: Only plain hub or SFI approved damper will be permitted. The water pump must remain in the stock location.
- 9: Only solid .842 diameter ferrous metal flat tappets will be permitted.
- 10: Only a cast iron cam, with a firing order of (18436572) will be permitted.
- 11: Only a straight wound spring with a flat damper, that conforms to the specifications will be permitted. PSI @ seat 90-120#, @.500 lift 330-355#, Inst. Ht. 1.700 -1.820, Dia. 1.262 +/- .005, Wire dia. .193 +/- .002, Free ht. 2.130 max. 1.950 min., 5 full coils +/- 1/8th turn as measured from tail to tail.
- 12: Only vented, wet sump, in pan, oil systems will be permitted.
- 13: Only rockers centered on, & retained by the 3/8" rocker studs will be permitted.
- 14: The maximum valve lift permitted is: (.510" int. .535" exh.) @ zero lash @ valve retainer. Only standard size & configuration, 7 degree retainers and keepers will be permitted.
- 15: Stud girdles, rev kits, or valve train stabilizers, will not be permitted.
- 16: Repositioning, boring or bushing of cam or lifter bores will not be permitted. The maximum cam diameter will be 1.869 + .002

17: Only valves that conform to the RaceSaver(R) original size, configuration, length & weight will be permitted. The sizes are as follows: stem size 11/32", Intake 1.94" .008 stem undercut. Exhaust 1.60", Orig. stem undercut to .315

18: Ferrous material only: Valves, Seats, Retainers, Keepers, Push rods, Springs, Tappets, Cam, Crank, Rods, Wrist pins, Fasteners, Main Caps. Materials and processes including, but are not limited to; Titanium, Inconel, Ceramics, DLC, Nikasil, will not be permitted.

19: Only point type Magnetos, or Kettering style ignition, will be permitted. Only naturally aspirated, constant flow fuel injection will be permitted.

20: An additional 100 lbs. penalty will be added to the minimum car weight for use of any electronics, including but not limited to: ignition, ECU's and/or active driver aids.

21: RaceSaver® SPEC cylinder head: Alterations of any type will not be permitted. Machining, milling, resurfacing, grinding, polishing, welding, acid or caustic work, shot peening, glass beading, coating, or any other process that will alter the machined surfaces or the natural sand cast finish, will not be permitted. The cylinder head must retain all original dimensions & configurations including; Valves, springs, retainers, stems, & guides. Only re-seating the valves is permitted. Top cuts that extend into the aluminum of the chamber will not be permitted. Under the seat relief cuts, will not be permitted. Alterations to as delivered throat size, 1.810 Int. & 1.345 Ex. (+ .000 - .005) will not be permitted. Bowl changes will not be permitted. Every dimension of these heads has a gauge dimension that must be met for them to be certified. Any changes will result in disqualification. The stamped identification marks may not be altered.

22: Compression Ratio: 10.25 to 1 will be the maximum allowable compression ratio. The compression ration may be checked with a whistle, or by measuring the volume of the assembled cylinder using liquid. The absolute minimum assembled cylinder volume measured at Top Dead Center (T.D.C.) is 70 cc. Any type of surfacing the heads will not be permitted without a repair authorization. Original serial numbers and certification marks must remain intact. They may not be altered or obscured. Any & all repairs MUST be pre-approved and the cylinder heads must be re-certified. If any spec head is found to be modified; it must be replaced with a certified spec head.

23. Repairs: In the event a cylinder head needs to be repaired, a repair authorization must be obtained by contacting RACESAVER® at 540-923-4541 before attempting repairs. After repair, the cylinder heads, completely assembled with all valves, spring, retainers, studs and guides, must sent to RACESAVER® for re-certification and registration. Recertified heads will be stamped with RACESAVER® & FGRS logos. The spirit and intent of RACESAVER® Engine Rules shall prevail. Any attempt to circumvent the rules may result in confiscation of suspect parts, and other significant penalties. RACESAVER ® determines compliance with specifications and rules. We reserve the right to exchange any spec cylinder head at any time. If the cylinder heads are altered, there will not be an exchange made. Altered cylinder heads will be removed from approved head registry. If a RaceSaver® engine competes in a non- sanctioned race, the engine is subject to be re-teched before returning to RaceSaver® events.

Any attempt to circumvent the rules may result in confiscation of suspect parts, and other significant penalties.

305 & 360 Procedure for Engine Inspection Request

1: Engine Inspection Request rules will not be in effect on the first two track point nights. Following the second night, no driver may request unless they have competed at **ALL** previous weekly track points nights.

NO SEALS WILL BE BROKEN ON SEALED AND REGISTERED 305 RACESAVER ENGINES.

2: An Engine Inspection maybe requested by a driver if the driver finished in one of the top four positions and the car makes legal weight of that nights Limited Sprint A feature race, then driver present Stuart Raceway promoter or technical official with \$600 dollars (by cashier's check or cash) within **FIVE** minutes after all legal weighed cars have stopped in tech area. Of the \$600 dollars \$100 of it will be kept by the Stuart Raceway and **NOT** refunded.

3: If an engine is found to be **LEGAL** after engine inspection request Stuart Raceway will give \$500 dollars to the driver of the car that was found to be within the rules.

4: If an engine is found to be **ILLEGAL** after engine inspection request Stuart Raceway will give \$500 dollars back to the driver who requested the inspection.

5: The driver(s) of the car that was found to be **ILLEGAL** will lose points and money for the race night and will also be disqualified until the engine or replacement engine is inspected by two Stuart Raceway technical officials with the heads and intake off.

6: A driver may use the Engine Inspection Request multiple times per race season, but cannot use the Engine Inspection Request on the same engine more than once per race season.

7: Engine Inspection **MAY BE DONE AT ANYTIME** by Stuart Raceway promoter or technical official at no cost to the track.